WEST

Freeform Search

Database: US Patents Full Text Database
US Pre-Grant Publication Full-Text Database
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Term:

Display: 20 **Documents in Display Format:** - **Starting with Number** 1

Generate: ○ **Hit List** ◉ **Hit Count** ○ **Side by Side** ○ **Image**

Search | Clear | Help | Logout | Interrupt

Main Menu | Show S Numbers | Edit S Numbers | Preferences | Cases

Search History

DATE: Tuesday, November 26, 2002 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR			
L54	L50 same (microsphere or microcapsule or microparticulate) same (cross near link$)	23	L54
L53	L51 and (phospholipids or lecithin)	97	L53
L52	L51 and (phospholipids)	69	L52
L51	L50 same (microsphere or microcapsule or microparticulate)	626	L51
L50	(PLGA or PLA or (polyanhydrides) or polylactic polymers) same calcium	30329	L50
L49	L48 and (lecithin or phospholipids)	3	L49
L48	L47 same (microsphere or microcapsule or microparticulate)	14	L48
L47	(PLGA or PLA or (polyanhydrides) or polylactic) same calcium	656	L47
L46	(calcium) same (cross near linking) same (liposomes)	7	L46
L45	(calcium) same (cross near linking) same (lipids or phospholipids or lecithin)	26	L45
L44	5855913.pn. and buffer	0	L44
L43	L41 same((pulmonary or lung) near delivery)	6	L43

L42	L41 same phospholipids	92	L42
L41	(matrix or microsphere or microcapsules) same (ions or salts)	30662	L41
L40	L39 and (lung or pulmonary)	13	L40
L39	L38 and (microparticulate or microsphere or matrix or microcapsule)	87	L39
L38	L36 same (phospholipids or lecithin or $choline)	347	L38
L37	L36 and (microparticulate or microsphere or matrix or microcapsule)	8688	L37
L36	particles same calcium	39327	L36
L35	L34 and (aerosol or pulmonary or lung)	59	L35
L34	matrix same calcium same ($lipids or lipids or lecithin)	188	L34
L33	matrix same calcium same ($lipids or lipids)	148	L33
L32	L31 and phospholipids	42	L32
L31	(microparticulate or microsphere or matrix or microcapsule) same calcium same stabil$	686	L31
L30	L24 and (pulmonary or lung or aerosol)	355	L30
L29	L24 and (pulmonary near delivery)	16	L29
L28	L24 and (pulmonary or respiratory or lung or inhalation or inhale)	344	L28
L27	L25 and (pulmonary or respiratory or lung or inhalation)	32	L27
L26	L25 and (pulmonary or respiratory or lung)	29	L26
L25	L23 same (lecithin or phospholipids)	95	L25
L24	L23 and phospholipids	555	L24
L23	(microparticulate or microsphere or matrix or microcapsule) same calcium	9405	L23
L22	l18 same phospholipids	39	L22
L21	L19 and phospholipids	16	L21
L20	L19 and lipids	24	L20
L19	L18 and (pulmonary near delivery)	25	L19
L18	(matrix or microsphere or microcapsules) same calcium	9293	L18
L17	(matrix or microsphere or microcapsules) and calcium	52950	L17
L16	5580575.pn. and calcium	1	L16
L15	5648095.pn. and calcium	0	L15
L14	5955143.pn. and calcium	0	L14
L13	5855913.pn. and lactose	1	L13
L12	L9 and Ca	1	L12
L11	L9 and Ca	1	L11
L10	L9 and calcium	0	L10
L9	L8 near justin	16	L9
L8	hanes.in.	889	L8
L7	l6 and (pulmonary or lung or respiratory)	18	L7
L6	L5 same (matrix or microsphere or microcapsules)	39	L6
L5	phospholipids same calcium	2106	L5
L4	L3 and calcium	91	L4
L3	L2 and (microspheres or microcapsules or matrix)	133	L3

L2	L1 and (pulmonary near delivery)	324	L2
L1	(phospholipids) and (inhalation or inhaler or aerosol)	5493	L1

END OF SEARCH HISTORY

WEST

Generate Collection | Print

L4: Entry 1 of 2 File: USPT Apr 23, 1996

DOCUMENT-IDENTIFIER: US 5510112 A
TITLE: Composition for enhancing the biodegradation of biodegradable organic wastes

Brief Summary Text (51):
The phospholipids are classified according to their polar headgroups into two major classes: 1) neutral-zwitterionic phosphatidylcholine (PC) referred to as lecithin; 2) less hydrophibic-amphoteric phospholipids such as phosphatidylethanolamine (PE), and 3) negatively-charged phospholipids such as phosphatidylglycerol (PG) or phosphatidylinositol (PI). While the cost of crude phospholipids (e.g. from soybean or rapeseed) is less than $1 per kg, that of highly purified lecithin may be a thousand fold or even more expensive.

L13: Entry 25 of 37 File: USPT Sep 5, 2000

DOCUMENT-IDENTIFIER: US 6114107 A
TITLE: Composition comprising raffinose, TMAO, sodium citrate and methods for the preservation of living tissues

Brief Summary Text (7):
The viability of biological materials stored in saline-based media gradually decreases over time. Loss of viability is believed to be due to the build-up of toxic wastes, and loss of metabolites and other supporting compounds caused by continued metabolic activity. Using conventional saline-based media, living tissues can only be successfully preserved for relatively short periods of time. Examination of the microstructure of organs stored towards the upper limit of time shows degeneration, such as of mitochondria in heart muscle, and the performance of the organ once replaced is measurably compromised. For example, a human heart can only be stored in cold ionic solutions for about 5 hours following removal from a donor, thereby severely limiting the distance over which the heart can be transported.

Drawing Description Text (42):
As detailed below, it has been determined that, with the exception of platelets, effective storage times for biological materials increase with the addition of calcium to the preservative compositions. This may be due to the ability of calcium to stabilize phospholipid bilayers found in cell membranes and to stabilize intercellular adhesion. Preferably the calcium is present as calcium sulfate or calcium chloride, and is present at a concentration greater than about 1.5 mM or less than about 2.0 mM, more preferably at a concentration of between about 1.5 mM and about 2.0 mM, and most preferably about 1.75 mM. The addition of either sodium sulfate or sodium citrate also increases effective storage times for many biological materials. A composition comprising between about 60% and about 80%, preferably about 70%, raffinose and TMAO, between about 40% and about 20%, preferably about 30% sodium sulfate, and about 1.75 mM calcium sulfate, with the raffinose and TMAO being present in a ratio of about 1.6:1 has been found to be particularly effective in preserving many biological materials.

WEST

Generate Collection | Print

L13: Entry 34 of 37 File: USPT May 14, 1996

US-PAT-NO: 5516662
DOCUMENT-IDENTIFIER: US 5516662 A

TITLE: Process for the preparation of headgroup-modified phospholipids using phosphatidylhydroxyalkanols as intermediates

DATE-ISSUED: May 14, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Singh; Alok	Springfield	VA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
The United States of America as represented by the Secretary of the Navy	Washington	DC			06

APPL-NO: 08/ 439074 [PALM]
DATE FILED: May 11, 1995

PARENT-CASE:
This is a division of application Ser. No. 08/099,639, filed Jul. 30, 1993, now U.S. Pat. No. 5,441,876, to Alok Singh, titled PROCESS FOR THE PREPARATION OF HEADGROUP-MODIFIED PHOSPHOLIPIDS USING PHOSPHATIDYLHYDROXYALKANOLS AS INTERMEDIATES.

INT-CL: [06] C12 P 9/00

US-CL-ISSUED: 435/131
US-CL-CURRENT: 435/131

FIELD-OF-SEARCH: 435/131, 554/78, 554/79

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected | Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4235792	November 1980	Hsia et al.	260/403
☐	4382035	May 1983	Eibl	260/403
☐	4587055	May 1986	Regen	260/413
☐	4624919	November 1986	Kokusho et al.	435/74
☐	4783402	November 1988	Kokusho et al.	435/52
☐	4849019	July 1989	Yasukawa et al.	106/244
☐	4933114	June 1990	O'Brien et al.	260/403
☐	5011964	April 1991	Mynarcik et al.	558/179
☐	5080911	January 1992	Saitou et al.	426/32
☐	5183750	February 1993	Nishide et al.	435/134
☐	5188951	February 1993	Tremblay et al.	435/131

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
200403	April 1986	EP	
62-205788	September 1987	JP	
1581810	December 1980	GB	
831129	May 1981	SU	
WO89/01524	February 1989	WO	

OTHER PUBLICATIONS

Mank et al., "Synthesis of acyl di-and triglycerols", Chemistry and Physics f Lipids, vol. 50, 1989, pp. 63-70.
Singh et al., "Phosphatidylhydroxyalkanols As Versatile Intermediates In The Synthesis Of Headgroup Modified Diacetylenic Phospholipids", Synthetic Communications, vol. 22, No. 16, Sep. 1992, pp. 2293-2304.
Achterberg et al., "Conversion Of Radiolabelled Ethanolamine Plasmalogan Into The Dimethylethanolamine And Choline Analogue Via Transphosphatidylation By Phospholipase D From Cabbage", Chemistry and Physics of Lipids, vol. 41, 1986, pp. 349-353.
Yang et al., "Transphosphatidylation by Phospholipase D", J. Biol. Chem., vol. 242, No. 3, 1966, pp. 477-484.
Chrastil et al., "Phospholipases C and D in Rice Grains", J. Agric. Food Chem., vol. 35, No. 4, 1987, pp. 624-627.
Shuto et al., "A Facile One-Step Synthesis Of Phosphatidylhomoserines By Phospholipase D-Catalyzed Transphosphatidylation", Chem. Pharm. Bull., vol. 25, No. 1, 1987, pp. 447-449.
Ali et al., "Mixed-chain phosphatidylocholine analogues modified in the choline moiety: preparation of isomerically pure phospholipids with bulky head groups and one acyl chain twice as long as the other", Chemistry and Physics of Lipids, vol. 50, 1989, pp. 11-21.
Juneja et al., "Repeated batch and continuous operations for phosphatidylglycerol synthesis from phosphatidylcholine with immobilized phospholipase D", Appl. Microbiol. Biotechnol., vol. 27, 1987, pp. 146-151.
Juneja et al., "Comparative study on conversion of phosphatidylchlorine to phosphatidylcylcerol by cabbage phospholipase D in micelle and emulsion systems", Enzyme and Microbiol. Technol., vol. 9, No. 6, 1987, pp. 350-354.
Markowitz, MA et al., Cheml Phys. Lipids 62:193-204 (1992).
Manyemana, F. et al. Tetrahedron Lett. 30:3077-80 (1989).
Nan, Z. et al., Huaxue Shiji 14:117-18 (1992).

ART-UNIT: 188

PRIMARY-EXAMINER: Wityshyn; Michael G.

ASSISTANT-EXAMINER: Saucier; S.

ATTY-AGENT-FIRM: McDonnell; Thomas E. Edelberg; Barry A.

ABSTRACT:

Phospholipase D enzyme is used to mediate the synthesis of a phosphatidylhydroxyalkanol in a first step. This phosphatidylhydroxyalkanol is reacted to produce a headgroup modified phospholipid in a subsequent step. In the first step, phospholipase D enzyme extract mediates transphosphatidylation of a phospholipid with an alcohol containing at least two hydroxyl groups per molecule, producing reproducible and nearly quantitative yields of a phosphatidylhydroxyalkanol. In the subsequent step, the hydroxyl head group of the phosphatidylhydroxyalkanol is further reacted with amino, carboxylic, halogen or thiol containing molecules to produce a headgroup modified phospholipid.

2 Claims, 0 Drawing figures